WHAT IS CLAIMED IS:

1. A graphics rendering engine, comprising:

a sequence of instruction addresses adapted for display upon a screen that is accessible to a user;

a sequence of processor pipeline stages attributable to respective ones of the sequence of instructions and, during times when a user selects one of the instruction addresses, the screen displays:

a designator for at least one of the instructions to denote the designated instruction will proceed to a succeeding stage in the processor pipeline during a next clock cycle; and

a non-designator for another one of at least one of the instructions to denote the non-designated instruction will not proceed to a succeeding stage in the processor pipeline during the next clock cycle.

2. The graphics rendering engine as recited in claim 1, wherein the screen comprises a graphical user interface (GUI).

3. The graphics rendering engine as recited in claim 1, wherein the screen comprises a pop-up window.

4. The graphics rendering engine as recited in claim 1, wherein the designator is a color that highlights the stage attributable to the at least one instruction that will proceed to the succeeding stage.

5. The graphics rendering engine as recited in claim 4, wherein the color differs depending on which stage is highlighted.

6. The graphics rendering engine as recited in claim 1, wherein the processor pipeline is a pipeline of a supserscalar processor where more than one instruction can exist within each stage of the pipeline.

7. The graphics rendering engine as recited in claim 1, wherein the user actuates a pointing device to select only one of the instruction addresses and, in response thereto, the screen displays a designator over the field bearing the stage name for all of the sequence of instructions that will proceed to the next stage in the pipeline sequence.

8. A software development tool, comprising:

source code represented as a first sequence of instruction addresses;

a graphics rendering engine coupled to receive the first instruction addresses and produce a graphical user interface (GUI) window that includes:

a breakpoint field that, upon receiving user input via a pointing device:

selects a particular instruction address within the first sequence of instruction addresses shown in a particular stage of a processor pipeline;

displays all instruction addresses within the first sequence of instruction address along with corresponding stages of the processor pipeline during a clock cycle in which the particular instruction address is within the particular stage;

assigns a designator to at least one instruction address of the first sequence of instruction addresses to denote the designated instruction will proceed to a succeeding stage in the microprocessor pipeline during a clock cycle succeeding the clock cycle;

assigns a non-designator to denote a non-designated instruction within the microprocessor pipeline;

an instruction address field that, upon selection by a user via the pointing device, allows the user to move said another at least one instruction address;

a scheduler that responds to the moved said another at least one instruction address to form a second sequence of instructions that has a higher instruction throughput in the processor pipeline than the first sequence of instructions.

9. The software development tool as recited in claim 8, wherein the graphics rendering engine further displays all instructions within the first sequence of instructions and assigns a designator to a number of the instruction address of the second sequence of instructions that exceed a number of the at least one instruction address of the first sequence of instruction addresses.

10. The software development tool as recited in claim 8, wherein the second sequence of instructions requires fewer clock cycles through the processor pipeline than the first sequence of instructions.

11. The software development tool as recited in claim 8, wherein the window comprises a pop-up window rendered upon a computer display screen.

12. The software development tool as recited in claim 8, wherein the designator is a color that highlights the stage attributable to the at least one instruction that will proceed to the succeeding stage.

13. The software development tool as recited in claim 12, wherein the color differs depending on which stage is highlighted.

14. The software development tool as recited in claim 8, wherein the processor pipeline is a pipeline of a supserscalar processor where more than one instruction can exist within each stage of the pipeline.

15. The software development tool as recited in claim 8, wherein the user actuates a pointing device to select only one of the instruction addresses and, in response thereto, the window displays a designator over a stage number field bearing the stage name for all of the first sequence of instructions that will proceed to the next stage in the pipeline sequence.

16. A method for displaying progression of instruction addresses through a processor pipeline, comprising:

selecting a breakpoint within a breakpoint column of a display screen to select:

an instruction address within the same line as the breakpoint, and

a clock cycle associated with the selected instruction address being in a stage within the processor pipeline ;

designating all instruction addresses within the processor pipeline that will proceed to the succeeding stage of the pipeline; and

not designating all instruction addresses within the processor pipeline that will not proceed to the succeeding stage of the pipeline.

17. The method as recited in claim 16, wherein said designating comprises receiving a signal from a stage debug register by a graphics rendering engine to denote the instruction addresses being designated will proceed to the next stage of the pipeline.

18. The method as recited in claim 16, wherein said designating comprises checking resources of a processor to determine if the instruction addresses will be allowed to proceed and, if so, sending a signal from a debug register that stores the checking outcome to designate the instruction addresses that have corresponding resources available to allow such instruction addresses to proceed.

19. The method as recited in claim 16, wherein said designating comprises highlighting the instruction addresses with a color different from the background color of the display screen.

20. The method as recited in claim 16, wherein said designating comprises highlighting the stage corresponding to the instruction addresses with a color, and wherein the color differs depending on which stage is highlighted.